

1999 Status & Condition of the Arizona Highway System

**Functional Classification • Levels of Development
Levels of Service • Present Serviceability Ratings
Bridge Sufficiency Ratings • Change in Conditions**



Arizona Department
of Transportation
Transportation Planning Division





Arizona Department of Transportation

Transportation Planning Division

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I am pleased to present the second annual Arizona Highway System Status and Condition Report. This report is intended to provide useful information about the condition of the State Highway System in a format that is readily accessible to transportation professionals and non-professionals. This report was produced by the Planning Team of the Transportation Planning Division (TPD). The maps contained in this report were developed through the team's Geographical Information System. There is a limited supply of hardcopies of this report, because we are producing this report in two other media. This report is available on CD-ROM and can also be viewed on our website. The TPD website is <http://map.azfms.com>. The statewide maps of Level of Service, Present Serviceability Rating, and Bridge Condition Rating are clickable. Just click on the area of interest and this information is displayed in more detail. To obtain this report on CD contact Lynn Sugiyama. Any comments, suggestions, or critiques should be directed to Joe Flaherty or Lynn Sugiyama of my staff. They can be contacted in the following ways:.

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Sincerely,

Mary Lynn Tischer, Director
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Introduction

The 1999 Arizona State Highway System Status and Condition Report is the second effort by the Arizona Department of Transportation's Transportation Planning Division to present information in a graphic format that is useful to both a professional and lay audience. In the past, reports of this type consisted of numerous tables, with a vast amount of numbers. They also consisted of graphs, charts and a few maps.

The Arizona state highway system route and lane mileage's are 6,619 and 17,370 respectively. This includes frontage roads. There are 3,945 bridges on the system. The data that is used to develop various performance measures are collected throughout the year and are stored in individual databases. These databases are integrated in the Highway Performance Monitoring System (HPMS) database. The HPMS database is then incorporated into the ADOT Geographical Information System (GIS).

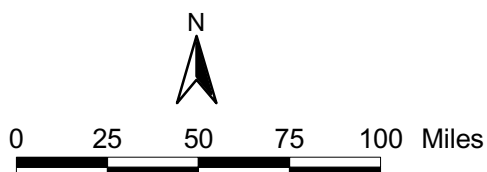
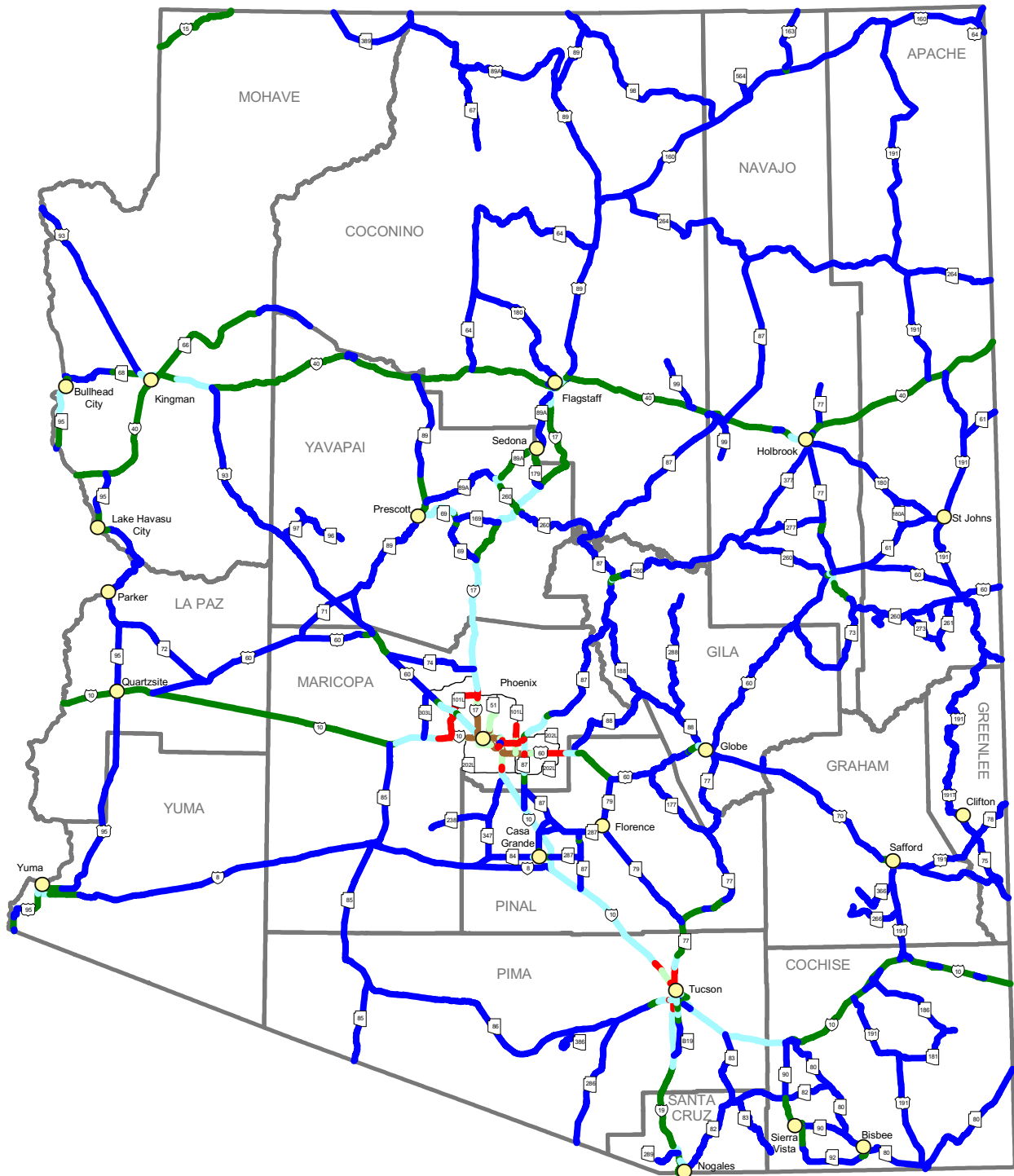
The GIS is a powerful tool that is used for analysis and mapping. The GIS was used for all the maps in this report with the exception of the Bicycle Suitability Map. Maps of the state highway system following this introduction show the 1997 Annual Average Daily Traffic (AADT) volumes and the percent of commercial vehicles in the traffic stream. Following these maps is the Bicycle Suitability Map and a brief overview of it's development

The data to develop the maps for Level Of Service (LOS), Present Serviceability Rating (PSR), and the Bridge Sufficiency Rating (BSR) was collected in 1997. It is the latest available. The functional classification of the state highway system was updated in 1997 as was the level of development.

The Functional Classification and the Level Of Development (LOD) maps are presented at the state level with insets where appropriate. The LOS, PSR, and BSR maps are presented at the county level again, with insets where appropriate. A verbal description of the information being depicted precedes each set of maps.

As stated above this is the second effort to present this volume and type of information in a graphic format. It is the second edition of what is intended to be an annual report. We have included maps that show the changes in conditions from one year to the next.

1997 AVERAGE DAILY TRAFFIC VOLUME ON THE STATE HIGHWAY SYSTEM

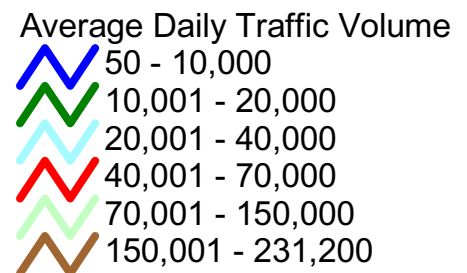
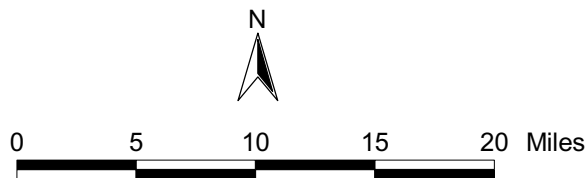
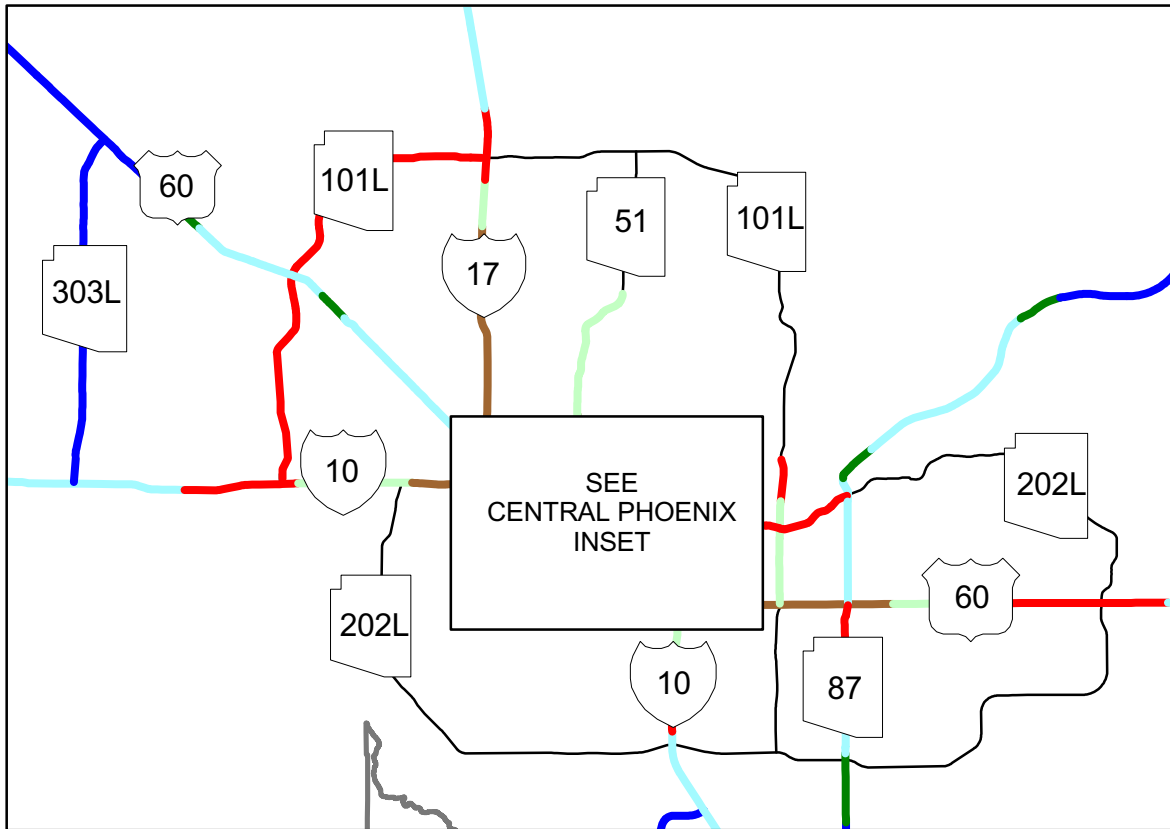


Average Daily Traffic Volume

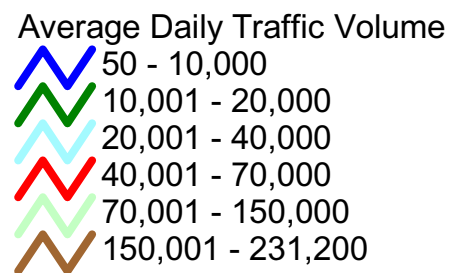
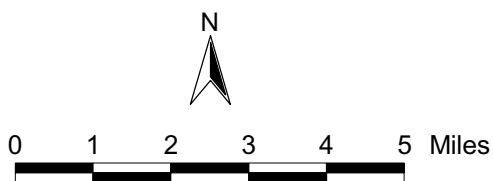
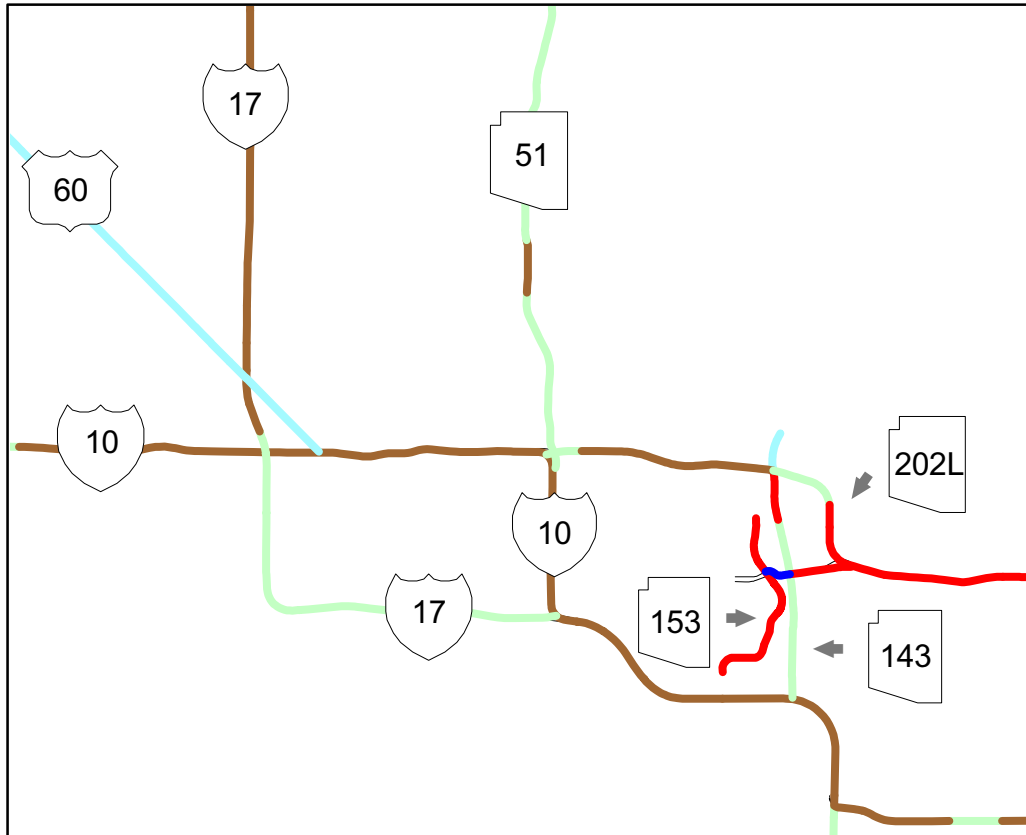


INSET

1997 AVERAGE DAILY TRAFFIC IN THE PHOENIX METROPOLITAN AREA

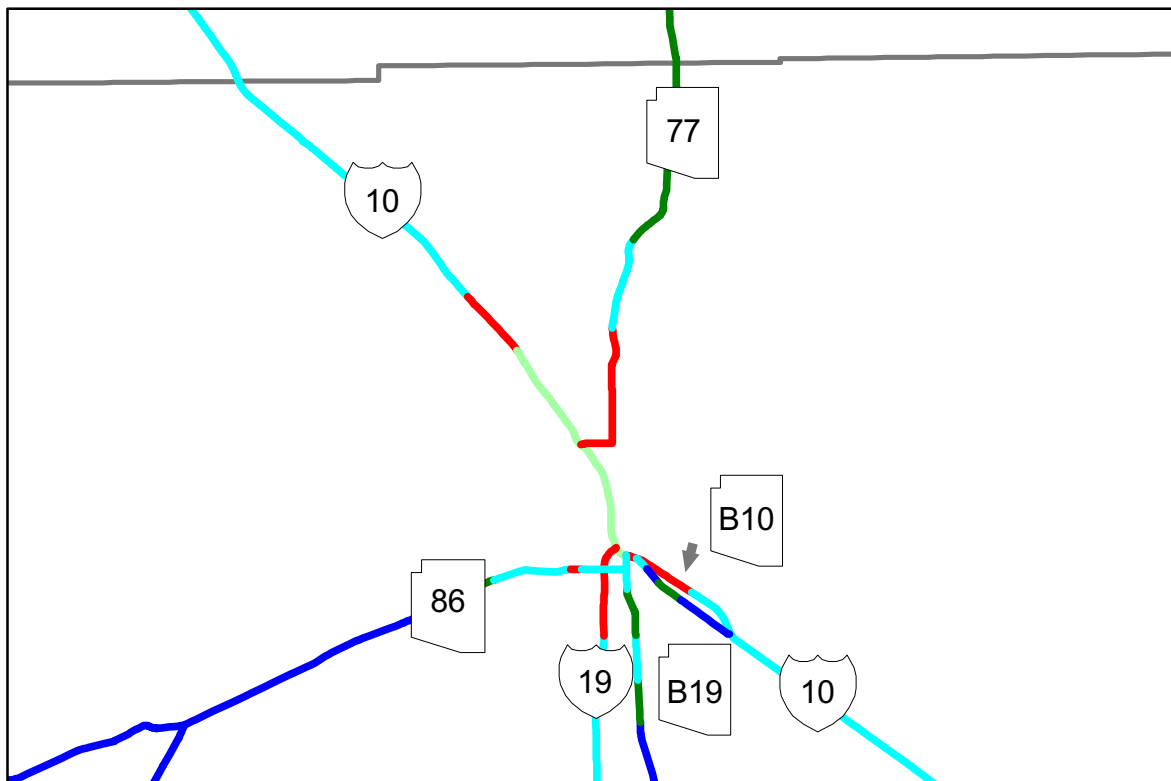


INSET 1997 AVERAGE DAILY TRAFFIC IN CENTRAL PHOENIX

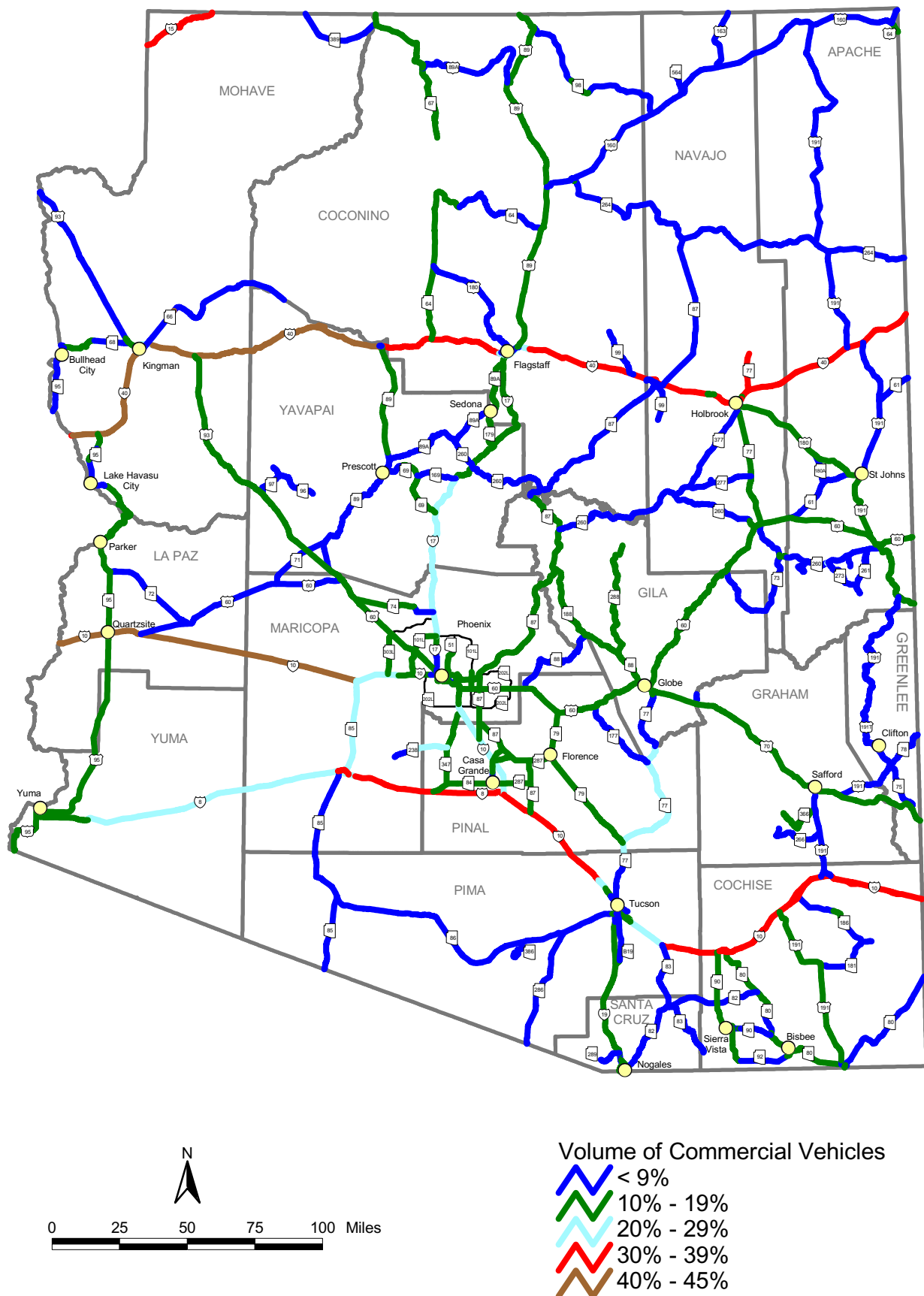


INSET

1997 AVERAGE DAILY TRAFFIC IN THE TUCSON METROPOLITAN AREA



1997 PERCENTAGE OF COMMERCIAL VEHICLES ON THE STATE HIGHWAY SYSTEM



Bicycle Suitability

Bicycle suitability ratings of **more suitable** and **less suitable** have been assigned by the Governors Arizona Bicycle Task Force (GABTF) to all of the roads on the State Highway System where bicycling is allowed. Characteristics considered in developing these ratings were: 1) average number of vehicles per lane per day, 2) lane width including shoulder and 3) the percentage of truck traffic to total traffic volume. All three factors were weighted and lane width had twice the assigned value of the other two characteristics. Information regarding grade ascent has also been provided to bicyclists to identify steep inclines along routes as an aid in planning tours. The Arizona Bicycle Suitability Map developed by ADOT contains suitability ratings and gradient information of roadways on the State Highway System.

Approximately 47% of these routes have a suitability rating of more suitable. The map on the following page depicts the bicycle suitability ratings of the routes on the State Highway System.

Map of Suitable Bicycle Routes on the State Highway System

